NEW ENGLAND NOTE

REDISCOVERY OF SOME RARE PLANTS ON MT. KATAHDIN

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In 1988, the Maine Herbarium of the University of Maine, Orono (ME) organized several botanical explorations of Mt. Katahdin in Baxter State Park, Piscataquis County, Maine for the purpose of re-locating plants not seen for at least twenty years. This effort was prompted by the recent establishment of Maine's Official List of Endangered and Threatened Plants (Dibble et al., 1989). The expeditions involved three trips: a small party went on a preliminary trip on May 27–29; a larger group went on June 24–26; and A. Dibble returned on July 29–31. Taxonomy in this report follows Fernald (1970), Kartesz and Kartesz (1980) and Hudson (1987).

The areas investigated by these parties include North Basin Pond, South Basin Pond, Depot Pond, Dry Pond, Chimney Pond, Saddle Trail, the head of Saddle Slide, the Cutoff Trail between Great Basin and North Basin, the Tableland from North Basin

to the head of Abol Slide, and North Basin.

The most noteworthy plants rediscovered as a result of these efforts are Carex katahdinensis Fern., Carex × mainensis Porter, and Euphrasia oakesii Wettst. Carex katahdinensis, not seen on Mt. Katahdin since 1900 when M. L. Fernald described it from a site at the gravelly margin of a small pond (Fernald, 1901; Williams, 1901; Hudson, 1988), was spotted by H. Hinds. Carex × mainensis, reputedly a sterile hybrid between C. saxatilis var. miliaris or C. s. var. rhomalea and C. vesicaria (Fernald, 1901, 1970; Scoggan, 1978), or between C. rostrata and C. saxatilis var. ?rhomalea (Scoggan, 1978), had also not been seen since 1900 (Critical Areas Program, 1985). Dibble rediscovered C. × mainensis in late July when she revisited the pond to check on the

Participants in the expedition were Christopher S. Campbell, Patricia E. DeHond, Scott Drummond, Betsy Knight, Patricia Ledlie, Candace McKellar, Janet S. McMahon, Constance S. Stubbs, Jill E. Weber, Andrew A. Whitman, Garret Van Wart, and the authors.

mature C. katahdinensis, with which it occurs. Euphrasia oakesii, a diminutive plant less than 2 cm tall, had not been seen since Fernald's record of July 11, 1900. Hudson, who had been searching for this plant for twelve years, spotted it at the base of a seepy escarpment in the remote North Basin. Apparently this plant is extremely local, occurring in an area about 1 m square. It is probable that sites for all three of the above species are the historic locations from which Fernald (1901) made his collections.

In the North Basin, Sorrie found a new subpopulation of Saxifraga stellaris L. var. comosa Retz. (= S. foliolosa R. Br. var. foliolosa), which is found in the eastern United States only on Mt. Katahdin. Hudson's (1987) work on the reproductive biology of this taxon has involved observation of three other small subpopulations there.

Two species, Carex katahdinensis and Euphrasia oakesii had been listed as Possibly Extirpated in Maine's Official List of Endangered and Threatened Plants (Dibble et al., 1989) but because of their re-location are now given state Endangered status.

Other plants of interest seen in 1988 included 15 State Endangered taxa (having a single known population in Maine), known in the state only from Mt. Katahdin. These taxa are Lycopodium sitchense Rupr., Poa fernaldiana Nannf., Carex saxatilis L., Luzula spicata (L.) DC., Salix herbacea L., Salix planifolia Pursh, Betula glandulosa Michx., Betula minor (Tuckerman) Fern., Viola palustris L., Cassiope hypnoides (L.) D. Don, Loiseleuria procumbens (L.) Desv., Phyllodoce caerulea (L.) Bab., Rhodendron lapponicum (L.) Wahlenb., Spiraea septentrionalis (Fern.) Love & Love (= S. latifolia var. s.) and Prenanthes nana (Bigelow) Torr. Six State Threatened plants (having 2-4 documented, recent occurrences in Maine) were seen: Hierochloe alpina (Willd.) Roemer & Schultes, Carex scirpoidea Michx., Salix uva-ursi Pursh, Arctostaphylos alpina (L.) Spreng., Epilobium hornemannii Reichenb. and Prenanthes boottii (DC.) Gray. Six plants of Special Concern status (having 5-10 occurrences) were seen: Lycopodium selago L., Agrostis mertensii Trin. (= A. borealis Hartman), Carex atratiformis Britt., Carex bigelowii Torr., Geocaulon lividum (Richards) Fern. and Arnica mollis Hook. Four Watch List species (having more than 10 occurrences, but of concern) were seen: Juncus trifidus L., Castilleja septentrionalis Lindl., Minuartia groenlandica (Retz.) Ostenf. and Viburnum edule (Michx.) Raf. In addition, some plants not often found in Maine and not currently on Maine's Official List were seen in 1988. These include Orobanche uniflora L., Senecio pauperculus Michx. and Viola labradorica Schrank.

Known to have occurred on Mt. Katahdin (Churchill, 1901; Fernald, 1901; Harvey, 1903; Hudson, 1988) but not seen in 1988 are the following: Potamogeton confervoides Reichenb., Deschampsia atropurpurea (Wahlenb.) Scheele, Festuca rubra L. var. Prolifera Piper, Phleum alpinum L., Trisetum triflorum (Bigelow) Love & Love (= T. spicatum var. pilosiglume), Carex rariflora (Wahlenb.) Sm., Luzula confusa Lindeberg, Listera auriculata Wieg., Salix arctophila Cockerell ex Heller, Salix argyrocarpa Anderss., Polygonum viviparum L., Silene acaulis (L.) Jacq. var. acaulis (= S. a. var. exscapa), Cardamine bellidifolia L., Draba allenii Fern. (= D. lactea M. F. Adams), Saxifraga paniculata P. Mill. (= S. aizoon var. neogaea), Epilobium anagallidifolium Lam. (= E. alpinum), Veronica wormskjoldii Roemer & Schultes (= V. alpina var. unalaschensis) and Gnaphalium supinum L.

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